



Black-billed gull – the second year of the national census repeat

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Black-billed gulls are endemic to Aotearoa/New Zealand, with most breeding on braided rivers in the South Island and a potentially expanding population in the North Island. Mischler (2018) reported on the results of counts conducted between 2014/15 to 2016/17, with the final year being the most comprehensive national count, and highlighted the difficulty in assessing population trends due to inaccurate historical data. The total number of breeding birds counted during the national census was higher than expected, but a key suggestion from the published paper was to repeat the survey in approximately 5-10 years for the purpose of establishing trends.

During the 2024/25 season, the census was repeated using the same methods as were used during 2016/17 and repeated in 2023/24. This involved conducting ground searches for colonies at the early stages of the breeding season to determine the stage of breeding within each region to establish the timing of flights, ideally during late incubation or hatching to capture the highest number of breeding pairs. A fixed-wing aircraft with a camera mounted underneath was used to fly all rivers in the South Island with suitable habitat. Continuous severe flooding in Southland and Canterbury delayed breeding, and numerous pre-flight checks were required. High-resolution photographs were taken from the plane, flight tracks were logged, and precise colony locations were taken with a GPS. Unfortunately, no West Coast flights were completed this year due to shortages and injuries amongst the volunteers. The North Island was surveyed on the ground by Department of Conservation staff or local Birds NZ members.

Ground counts were done for as many colonies as possible in the South Island, provided that they were of medium size in order to reduce disturbance. The ground counts will be compared to the nest counts from aerial photographs, and a correction factor will be calculated to adjust the aerial photograph counts. All aerial photograph nest counts will be conducted by the same two observers who also counted images in 2023/24, and the mean count for each colony only counted with aerial photographs will be used for the total count after being adjusted with the correction factor. Initial counts by one observer for the South Island are indicative of a relatively stable population; however, final numbers are not yet completed. Not all North Island colony and nest numbers have been collated either. Considering the challenges caused by the weather this year resulting in continuous flooding of rivers and hence colonies, it was incredibly insightful to be able to repeat two consecutive counts to account for annual variability and movements of birds and colonies between rivers. Environment Canterbury, Department of Conservation, Environment Southland, and Birds NZ Research Fund all provided funding for both years.



Moving in to do a ground count of a black-billed gull colony in the Southland region. Photo: C. Mischler



Aerial photograph of a colony in Otago used for counting nests.



Ground counts of a colony in Southland. Photo: C. Mischler